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| 10/783,776 | 02/20/2004 | Jeffrey C. Schlimmer | MS1-1853US | 6672 |
| 22801 LEE & HAVE | 7590 07/13/200 | · · | EXAM | IINER |
| LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 | | E 500 | PORTKA, GARY J | |
| SPOKANE, W | A 99201 | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | Application No. | Applicant(s) | | | | |
| | 10/783,776 | SCHLIMMER | SCHLIMMER ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Gary J. Portka | 2188 | | | | |
| The MAILING DATE of this communication apperiod for Reply | pears on the cover sheet w | ith the correspondence | e address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNION (136(a). In no event, however, may a will apply and will expire SIX (6) MON (6), cause the application to become Af | CATION. reply be timely filed ITHS from the mailing date of the BANDONED (35 U.S.C. § 133). | nis communication. | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 19 A | April 2007. | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| . closed in accordance with the practice under | Ex parte Quayle, 1935 C.D |). 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) <u>1-38</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-38</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or | awn from consideration. | | | | | |
| Application Papers | | · | | | | |
| 9) The specification is objected to by the Examine | | | | | | |
| 10) The drawing(s) filed on is/are: a) acc | | • | | | | |
| Applicant may not request that any objection to the | • , , | · | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E | , | • • | | | | |
| Priority under 35 U.S.C. § 119 | | | • | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list | its have been received. Its have been received in Apprity documents have been au (PCT Rule 17.2(a)). | Application No received in this Natio | nal Stage | | | |
| Adda ali wa a walfa l | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview | Summary (PTO-413) | | | | |
| 2) Notice of Practices Cited (PTO-992) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/13/06 | Paper No(| s)/Mail Date nformal Patent Application | | | | |

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DETAILED ACTION

1. Claims 1, 9, 15, 21, 26, and 34 were amended by Applicant. Claims 1-38 are pending.

Response to Arguments

2. Applicant's arguments filed April 19, 2007 have been fully considered but they are not persuasive. Applicants have argued that the policies of Gates apply to the objects, and not to clients as claimed. However, since objects may be associated with clients, for example by being copied into that clients local address space, the policies apply to the clients associated with the object, to the extent claimed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 3, 4, 6-13, 15-18, 20-23, 25, 26, 28, 29 & 31-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Gates et al. (US Patent # 6,430,576), herein Gates.
- 5. As per Claim 1, Gates discloses a method comprising: generating a policy digest (i.e., differences in copies of the objects) for a cached policy that applies to a client [i.e., the method or behavior of an object, as used by or at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], the policy digest identifying at least one assertion the client is complying with [whether

objects are synchronized, Column 6, Lines 45-67]; and including the policy digest in a request by the client to access a resource [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].

- 6. As per Claim 3, Gates further discloses the method of claim 1, wherein generating the policy digest includes encoding a bit vector identifying selected assertions from the cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].
- 7. As per Claim 4, Gates further discloses the method of claim 1, wherein generating the policy digest includes reading an assertion from the policy, assigning a bit value to the assertion, and writing the bit value to a bit vector [Column 6, Lines 36-60 & Column 7, Lines 50-61]. Examiner understands the user-defined mapping of the objects, as taught by Gates and described in Column 6, Lines 37-44, which contain a mutation of specific conditions for the flexible policy are functionally equivalent to the 'assertions' claimed by Applicant.
- 8. As per Claim 6, Gates further discloses the method of claim 1, further comprising: incrementing a counter each time the cached policy is used; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60]. Examiner emphasizes one such policy assertion, as taught by Gates, includes measuring the number of requests and comparing to a limit (e.g. "10 messages").
- 9. As per Claim 7, Gates further discloses the method of claim 1, further comprising: incrementing a counter for the cached policy when a fault is received at the

client in response to using the cached policy; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60 & Column 9, Lines 32-48]. Examiner understands Gates to replace data upon a fault occurring or "when it is needed" in the local object space.

- As per Claim 8, Gates further discloses the method of claim 1, further comprising 10. logging a diagnostic event when a fault is received at the client to identify a system problem [Column 9, Lines 49-67].
- 11. As per Claim 9, Gates discloses a method comprising: extracting at a host a policy digest (i.e., differences in copies of the objects) identifying a cached policy applying to a client (i.e., the method or behavior of an object at a client), the policy digest included in a request to access a resource [see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Line 56 to col 4 line 2, & Column 6, Lines 36-44 and 61-67]; and denying access to the resource if the policy digest identifies an invalid policy ["No" branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].
- 12. As per Claim 10, Gates further discloses the method of claim 9, further comprising issuing a fault for the client if the policy digest identifies an invalid policy [Column 9, Lines 32-48].
- 13. As per Claim 11, Gates further discloses the method of claim 9, further comprising decoding the policy digest [Column 7, Lines 50-61]. Examiner understands that the remote resource must decode the 'mutations of objects' in order to provide the client with any response to include requested data.

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14. As per Claim 12, Gates further discloses the method of claim 9, further comprising decoding a bit vector of the cached policy [Column 6, Lines 61-67 & Column 7, Lines 15-24]. Examiner understands that transferring encoded information to the server, or host, would require decoding the data before use.

- 15. As per Claim 13, Gates further discloses the method of claim 9, further comprising reading an assertion from the policy digest [Column 6, Lines 45-60].
- 16. As per Claim 15, Gates discloses a system comprising: a policy digest (i.e., differences in copies of the objects) identifying at least one cached policy that applies to a client [i.e., the method or behavior of an object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67]; and a messaging module denying access to a resource if the policy digest identifies an invalid policy for the resource ["No" branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].
- 17. As per Claim 16, Gates further discloses the system of claim 15, wherein the messaging module extracts the policy digest from a message requesting access to the resource [Column 7, Lines 50-61].
- 18. As per Claim 17, Gates further discloses the system of claim 15, wherein the messaging module decodes the policy digest [Column 7, Lines 50-61].
- 19. As per Claim 18, Gates further discloses the system of claim 15, wherein the policy digest is a bit vector of a cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].

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20. As per Claim 20, Gates further discloses the system of claim 15, wherein the policy digest identifies at least one selected assertion [Column 6, Lines 45-60].

- 21. As per Claim 21, Gates discloses a system comprising: a policy digest (i.e., differences in copies of the objects) for a cached policy that applies to a client [i.e., the method or behavior of an object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], the policy digest identifying at least one assertion the client is complying with [whether objects are synchronized, Column 6, Lines 45-67]; and a messaging module including the policy digest in a request by the client to access a resource [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].
- 22. As per Claim 22, Gates further discloses the system of claim 21, wherein the messaging module encodes the policy digest [Column 6, Lines 36-60 & Column 7, Lines 50-61].
- 23. As per Claim 23, Gates further discloses the system of claim 21, wherein the policy digest is a bit vector of a cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].
- 24. As per Claim 25, Gates further discloses the system of claim 21, wherein the policy digest identifies at least one assertion selected by the client [Column 6, Lines 45-60].
- 25. As per Claim 26, Gates discloses a computer program product encoding a computer program for executing on a computer system a computer process, the

computer process comprising: generating a policy digest (i.e., differences in copies of the objects) for a cached policy that applies to a client [i.e., the method or behavior of an object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], the policy digest identifying at least one assertion the client is complying with [whether objects are synchronized, Column 6, Lines 45-67]; and including the policy digest in a request by the client to access a resource [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].

- 26. As per Claim 28, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises encoding a bit vector of the cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].
- 27. As per Claim 29, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises reading an assertion from the policy, assigning a bit value to the assertion, and writing the bit value to a bit vector [Column 6, Lines 36-60 & Column 7, Lines 50-61].
- 28. As per Claim 31, Gates further discloses the computer program product of claim 26, wherein the computer process further comprises: incrementing a counter each time the cached policy is used; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60].
- 29. As per Claim 32, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises: incrementing a counter for the cached policy when a fault is received at the client in response to using the cached

policy; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60 & Column 9, Lines 32-48].

- 30. As per Claim 33, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises triggering a diagnostic event when a fault is received at the client [Column 9, Lines 49-67].
- 31. As per Claim 34, Gates discloses a computer program product encoding a computer program for executing on a computer system a computer process, the computer process comprising: extracting at a host a policy digest (i.e., differences in copies of the objects) identifying a cached policy that applies to a client (i.e., the method or behavior of an object at a client), the policy digest included in a request to access a resource [see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67]; and denying access to the resource if the policy digest identifies an invalid policy ["No" branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].
- 32. As per Claim 35, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises decoding the policy digest [Column 7, Lines 50-61].
- 33. As per Claim 36, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises decoding a bit vector of the cached policy [Column 7, Lines 50-61].

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34. As per Claim 37, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises reading an assertion from the policy digest [Column 6, Lines 45-60].

Claim Rejections - 35 USC § 103

- 35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 36. Claims 2, 5, 14, 19, 24, 27, 30 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gates et al. (US Patent # 6,430,576) as applied to claims 1, 9, 15, 21, 26 & 34 above, and further in view of Atkinson et al. (US Patent # 6,519,764), herein Atkinson.
- 37. Gates does not expressly disclose generating or using a hash of the policy digest. However, Atkinson discloses a hash as claimed by applicant:
- 38. As per Claim 2, Atkinson further discloses the method of claim 1, wherein generating the policy digest includes generating a hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].
- 39. Gates and Atkinson are analogous art because they are from similar problem solving areas: data object identification to distinguish appropriate resources. At the time of invention, it would have been obvious to a person of ordinary skill in the art to apply the hashing functions, taught by Atkinson, with the cache policy system taught by

Gates. The suggestion/motivation for doing so would have been to bind source information to a meaningful moniker which encapsulates the referenced data, as disclosed by Atkinson in Column 9, Lines 1-6. The benefit of such information binding is to reduce confusion between different policies or subsequent versions of similar policies.

- 40. As per Claim 5, Atkinson further discloses the method of claim 1, wherein generating the policy digest includes generating a hash of the cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].
- 41. As per Claim 14, Atkinson further discloses the method of claim 9, further comprising reading a row hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].
- 42. As per Claim 19, Atkinson further discloses the system of claim 15, wherein the policy digest is a row hash of a normalized policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].
- 43. As per Claim 24, Atkinson further discloses the system of claim 21, wherein the policy digest is a row hash of a normalized policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].
- 44. As per Claim 27, Atkinson further discloses the computer program product of claim 26 wherein the computer process further comprises generating a hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

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45. As per Claim 30, Atkinson further discloses the computer program product of claim 26 wherein the computer process further comprises generating a row hash of the cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].

46. As per Claim 38, Atkinson further discloses the computer program product of claim 34 wherein the computer process further comprises reading a row hash of the cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].

Conclusion

47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gary J Portka Primary Examiner Art Unit 2188

July 7, 2007

GARY PORTKA
PRIMARY EXAMINER